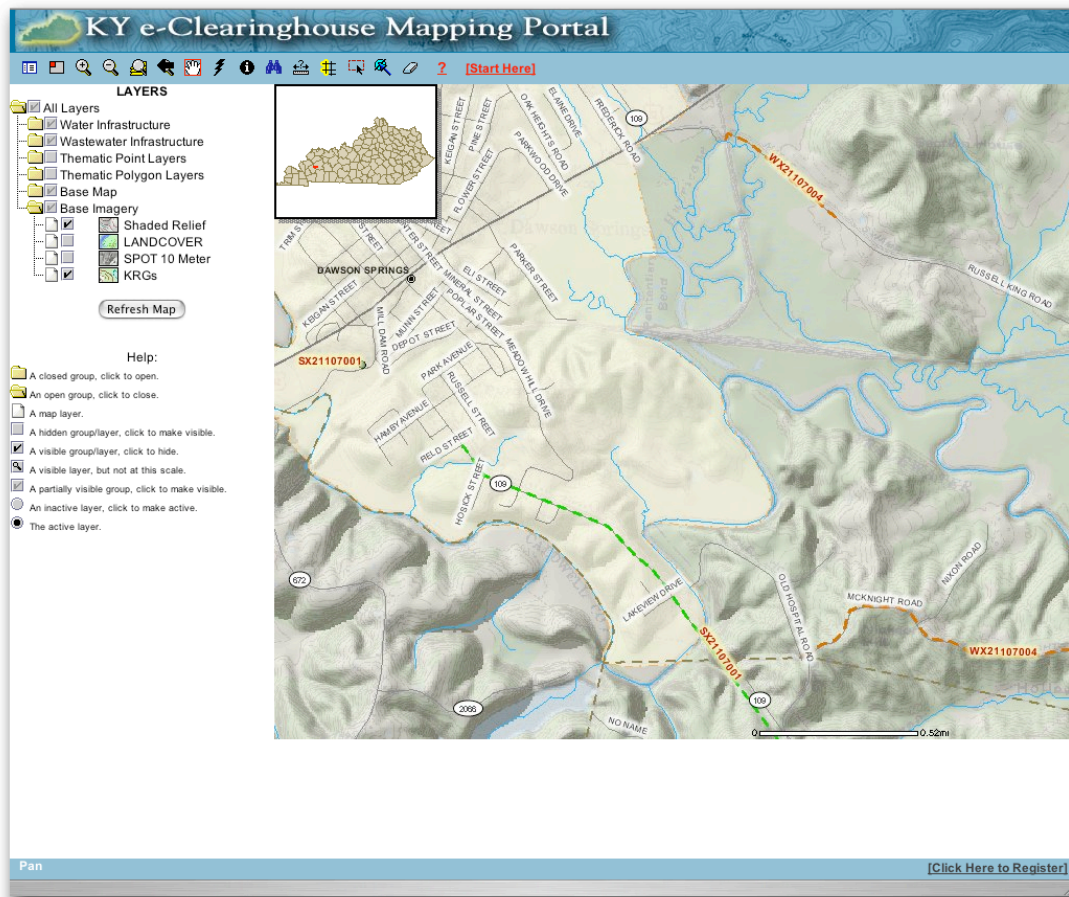


Kentucky e-Clearinghouse Mapping Portal Training Guide



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Quick Overview

The Kentucky e-Clearinghouse Mapping Portal provides users of the KY e-Clearinghouse with access to mapped information regarding water and wastewater infrastructure projects along with a collection of base and other thematic layers. Both applicants and review staff are able to access this Portal with a minimum of computing resources.

The Portal was built using ArcIMS 4.0, the industry-standard internet mapping software by ESRI. It leverages the Geographic Information System (GIS) data holdings of the Kentucky Geography Network (<http://kygeonet.ky.gov/>), many of Kentucky's approved basemap layers, as well as, water and wastewater infrastructure data obtained through the Kentucky Drinking Water/Wastewater Project Profile (<http://wris.ky.gov/ppform/>) process.

Each of the Portal's functions will be demonstrated with a specific focus on using it from a project review perspective. Participant's will learn how to find a project and look at it in conjunction with the various thematic GIS layers within the Portal.

NOTE: It is assumed that most participants have had some experience working with maps and other types geographic information.

Computer Hardware and Software Requirements

Only three basic things are needed in order to access the Portal: Computer, Internet Access, and a Web Browser. Currently, most any Kentucky e-Clearinghouse Applicant or project review staff will have the required computing resources. Utilization of the Portal via a modem connection to the internet will work, but it is not recommended (unless you are very patient). It can take as long as 3-4 minutes for the Portal to load on a 28K Modem connection. Accessing the Portal using any sort of broadband/high-speed internet connection will provide the best user-experience.

In terms of a web browser, the Portal has been successfully tested on several operating systems using various web browsers. However, it is our understanding that the web browser requirement for the primary Kentucky e-Clearinghouse application is Microsoft Internet Explorer 6.0 or greater. As a result, that will also be the "published" standard for the Kentucky e-Clearinghouse Mapping Portal.

How to Access the Mapping Portal

There are multiple ways that a user can access the Portal. How a user chooses to access this resource will be dependent upon what they are trying to accomplish or information they've been given that helps them locate the project. Simply put, there is no "wrong" way to access the Portal, only what works best for you!

Registration: Registration is required before anyone can access the Portal. This is done due to the sensitive nature of some of the included infrastructure data and so that users of the application can be tracked and notified if there are problems/issues with the service.

Visit the following site in order to register: <http://wris.ky.gov/registration/>

Read the notice > Click the "Continue" link > Click the "Click here to Register" link > complete the form (note required fields) > Click "Submit"

The first screenshot shows a "Security Notice" page with a "Continue" button highlighted in a red box. The second screenshot shows the main registration page with "Click here to Register" and "Click here to Login" buttons highlighted in red boxes. The third screenshot shows the registration form with various input fields and a "Submit" button highlighted in a red box.

Security Notice

READ THE FOLLOWING NOTICE

Security Notice

The Kentucky Geography Network (KYGEONET) was developed and is maintained exclusively among GIS Users in the Commonwealth of Kentucky. In the interest of securing key internal mapping sites, the KYGEONET is implementing a registration process that must be completed in order to gain access to the secure KYGEONET datasets.

Access to these secure KYGEONET datasets will only be available to those individuals who have successfully registered on-line through the appropriate form. This security policy affects all present and future users of these datasets. Requests from the registration database will be generated, reviewed, and distributed to designated security agencies.

Please note that ALL access to the KYGEONET servers is continuously logged, maintained for reasons of security, and is made accessible to security and law enforcement agencies.

Unauthorized attempts to upload information or change information in these datasets are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986, the National Information Infrastructure Protection Act, as well as Kentucky Revised Statute (KRS) 434.853.

[Continue]

Registration Page

For other Kentucky Government Sites visit kentucky.gov

Kentucky's Geographic Explorer

- If you are already registered
- If you need to register

[Click here to Login](#)

[Click here to Register](#)

Registration Form

For other Kentucky Government Sites visit kentucky.gov

Kentucky's Geographic Explorer

INSTRUCTIONS: Please complete fields marked with *

* First Name:

* Last Name:

Middle Initial:

* Email:

Entity:

Street Address:

* City:

* State:

* Zip:

Country:

Phone:

* Area of Interest:

Please select a Username and Password below:

* User Name:

* Password:

* Retype Password:

[Submit] [Reset]

e-Clearinghouse Application: The primary method of access will be through the e-Clearinghouse application itself. Users of the e-Clearinghouse application will note that there is a “View Map” button on most project screens.

Water Project Application: Kentucky e-Clearinghouse - Microsoft Internet Explorer

KY e-Clearinghouse

Water Project Application

Project Identification Contacts PW/IS Anticipated Impact Water Project Detail Budget & Schedule

The project is consistent with and included in the Area Water Management Plan: ☒ (Please check to be able to save the form.)

WRIS Number: * WK21129002 Search Cancel

Federal Tax ID Number:

Applying Entity: City of Beattyville

Owner (if other than applying entity):

PW Plants:

PROJECT COUNTY:

Project County: LEE

Multicounty project? ☐

PROJECT DESCRIPTION:

Project Title: New Water Treatment Plant Project

Narrative: The proposed project includes acquisition of four acres of property, construction of a 2mgd water treatment plant, water office with drive-thru payment window, bulk water purchase station, equipment.

Check all that apply to your project:

Drinking Water

Source ☐

Treatment ☒

Distribution ☐

Storage ☐

If Other, describe

Project Phase (check all that apply):

Planning ☐

Construction ☒

Sewer System Evaluation Survey ☐

Design (e.g., hydraulic analysis) ☒

Management (e.g. improvements) ☐

Water Loss survey ☐

CENSUS INFORMATION

Median household income: * \$ 28,000.00

Low to moderate income persons: * % 20

Poverty: * % 5

View Map Save Cancel Close

User: TTaylor Water Application Need help? Click [here](#)

View Map

Simply Click the “View Map” button and a new browser window will appear with the Portal active and zoomed to the selected project.

e-Clearinghouse Mapping Portal – Main Portal Entry Page: Another method would be to utilize the following URL:

<http://kygeonet.ky.gov/kyeclearinghouse/main.htm>

This link directs the user to a page with a series of pulldown menus for zooming to a county, city, or quadrangle and input forms for water and wastewater project numbers.

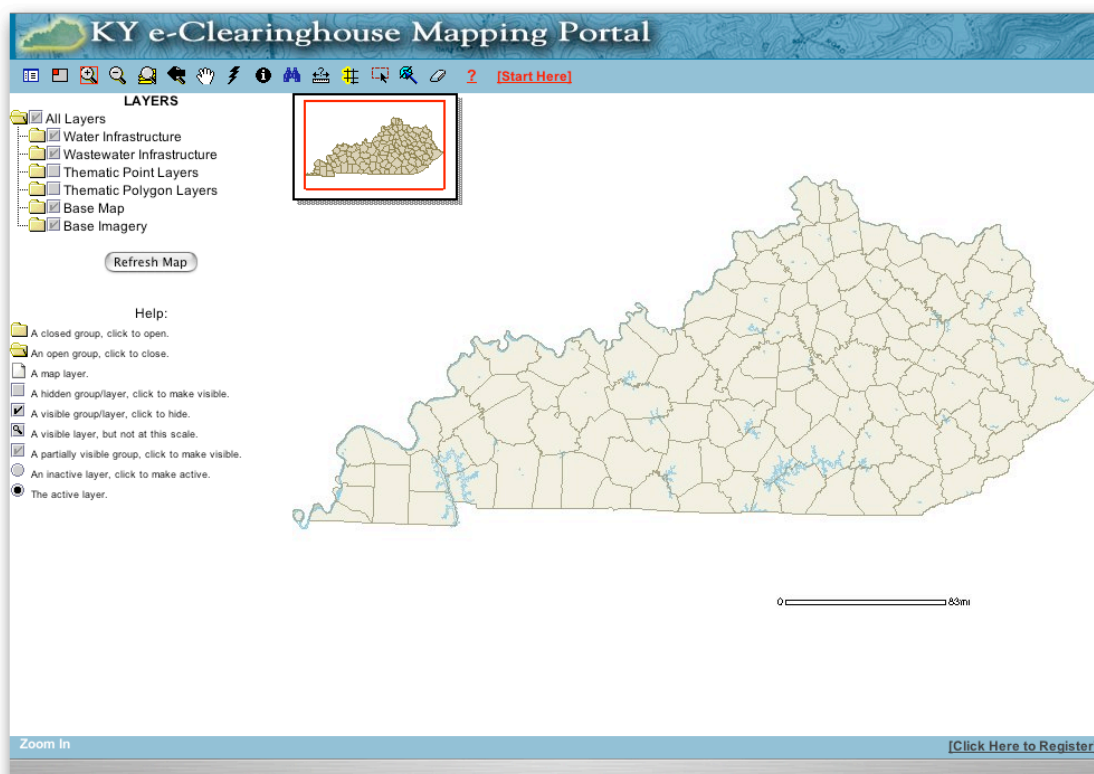
The screenshot shows the main entry page of the KY e-Clearinghouse Mapping Portal. At the top, there is a header with the text "KY e-Clearinghouse Mapping Portal" and a small map icon. Below the header, a note states: "NOTE: You must be a registered user to access this secure Internet Mapping Application. In order to register, please [click here](#). Use this page to gain quick access to the Kentucky e-Clearinghouse Mapping Portal. The tools on this page will allow you to find or zoom to a feature of interest." Below the note, there are three pulldown menus: "Zoom to a County . . .", "Zoom to a City . . .", and "Zoom to a Quadrangle . . .". Each menu has a small blue arrow icon on the right. Below the menus, there are two sections for project numbers. The first section is titled "Enter a Wastewater Infrastructure Project Number Below:" and includes a note: "NOTE: Your Project Number should be 10 characters long and start with a 'SX21'." and an example: "Example - SX21013026". Below the note, there is a text input field containing "SX21" and a "Map It!" button. The second section is titled "Enter a Water Infrastructure Project Number Below:" and includes a note: "NOTE: Your Project Number should be 10 characters long and start with a 'WX21'." and an example: "Example - WX21239003". Below the note, there is a text input field containing "WX21" and a "Map It!" button.

Click on any of the pulldown menus to access a listing of counties, cities, or quadrangle names. Select the desired item from the list and it will zoom to the extent of that item in the Portal.

Also, if you know the SX or WX project number for a wastewater or water project, simply enter it into the form field and click the "Map It!" button. It will zoom to the features of that project in the Portal.

e-Clearinghouse Mapping Portal – HTML Viewer: Another URL link can be used to access the Portal as well. It directs the user to the Portal in a statewide viewing mode.

<http://kygeonet.ky.gov/kyeclearinghouse/viewer.htm>



Accessing the Portal in this manner allows the user to zoom into the map at any area of interest rather than zooming to a city, county, or quadrangle. For example, a review staff person may wish to view project data in a multi-county area rather than using the default views of county, city and quadrangle.

Advanced Access Methods: There are several other ways to access the map service in the Portal, but doing so requires the installation of the appropriate GIS software. Users interested in accessing the service in this way need one of the following software packages:

ESRI's ArcExplorer 4.0+ (Free) <http://www.esri.com/software/arcexplorer/index.html>

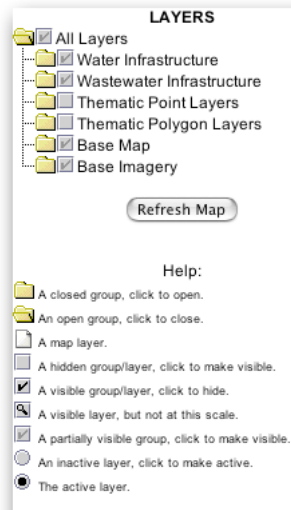
ESRI's ArcView GIS 8.2+ <http://www.esri.com/software/arcgis/arcview/index.html>

ESRI's ArcGIS Desktop 8.2+ <http://www.esri.com/software/arcgis/arcinfo/index.html>

Working with Layers

Map information in the Portal is arranged by “Layer”. Each layer can be turned ON or OFF and can be selected as the “active” layer. The scale at which each layer becomes visible within the Portal varies according to its suitability for viewing at a particular scale and based on feedback from those who tested the Portal during its development. If a layer is visible, but not at the current scale, a small gray square with a black magnifying glass will be shown to the left of the layer name.

Note (see below) that when the user first accesses the site the layer menu is “collapsed”. Also make note of the “Help” section just below the layer listing. This Help section shows the different layer icons and what they indicate.

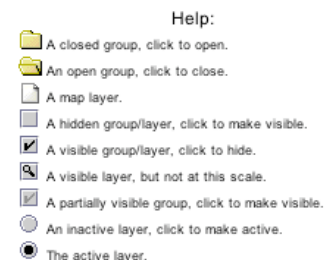
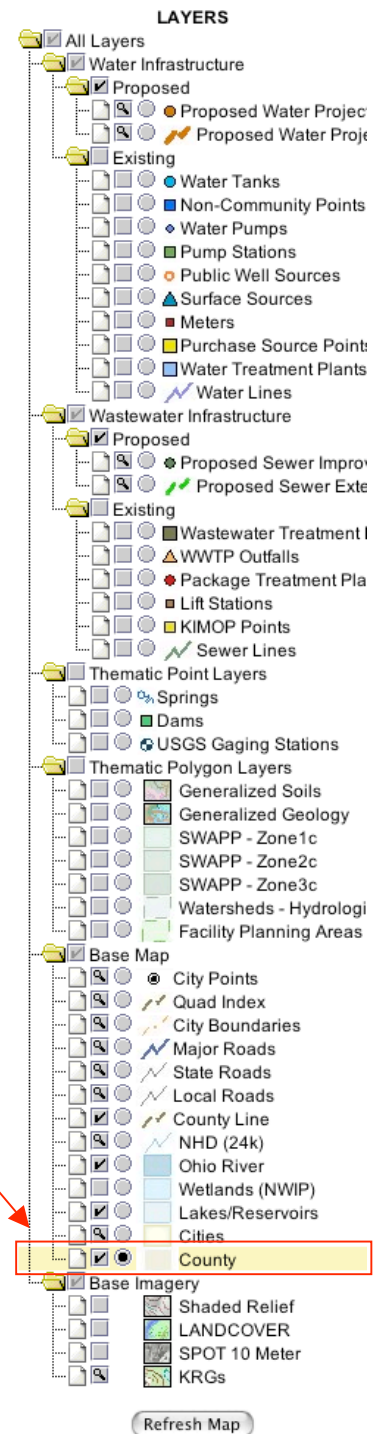


Simply click on a closed group or “folder” and it will expand showing the map layers available in that group. The example to the right shows all folders expanded.

Take note that the layer “County” has been selected as the “active” layer. The filled black circle and the yellow highlighting of the line show that the user has made it the active layer.

Users cannot change the order in which the layers are presented but any combination of layers can be viewed at any time. For example, a review staff person may be reviewing a project that involves a surface source for a drinking water facility. In that instance the user would want to turn on both proposed and existing water and wastewater infrastructure to see if any WWTP Outfalls are close to the proposed surface source.

There are several layers that by default are NOT visible: Shaded Relief, Landcover, SPOT 10 Meter, all Thematic Polygon Layers, all Thematic Point Layers, as well as, both existing water and wastewater infrastructure. Simply turn on those layers as



they are needed and turn off any layers that are not of interest to the review. All the layers in a Folder can be turned ON or OFF by clicking on the gray square to the left of the layer name. For example, that function is handy when the user wishes to turn ON or OFF all Existing Water Infrastructure with only one click.

Also visible in the Layer listing is the symbology for each layer, or essentially, the map legend. The Portal does NOT allow the user to change the symbology, but every attempt has been made to ensure that the symbols work well with all other base and thematic map elements.

Tool Usage

There are several tools in the Portal that allow the user to navigate, query attributes, and find text strings. Each of these tools can be accessed in the toolbar near the top of the window.



Allows the user to toggle between displays of the Symbology and Map Layers in the far right frame within the viewer.



The Overview button simply turns on or off the overview area of the map. This small map in the upper left corner of the main map display indicates the current view area.



Allows the user to zoom in by either clicking in the view area or dragging the + cursor to create a boxed area that will determine the extent of the new view.



Allows the user to zoom out by either clicking in the view area or dragging the + cursor to create a boxed area that will determine the extent of the new view.



Allows the user to return to the original view of Kentucky with county boundaries displayed.



This button takes the user back to the scale and position of the last view (DO NOT use the "Back" button on your browser . . . it will not work).



The "Pan" button allows the user to take the cursor, click on the view and while still holding the mouse button down, drag the view in any direction to obtain a new view of the desired area at the same scale.



The "Hyperlink" button allows the user to click on a feature on a layer in which hyperlinking has been activated. Another window will be spawned that will show the metadata for the item on the Kentucky Geography Network.



The Identify button allows the user to view the attributes of a particular feature. Simply select the layer desired to be active before using the Identify tool. It will only return attributes for the active layer. The attributes will be displayed on the bottom of the view area. If the desired layer/feature for which attributes are desired isn't listed in the Layer view, zoom in until it is displayed, then identify it.



The Find button allows the user to search for a text string in the "active" layer. This search is case sensitive so to search for a particular city (for example) the user will need to capitalize the first letter.



The "Measure" button allows the user to click on 2 or more points and return the distance. It keeps track of the length of the segment as well as a running total in case there is a need to obtain the length of a route between multiple points.



This button is used to create a zone around a specific feature at a designated distance from the feature. It can also be utilized to highlight another feature that falls within the defined buffer zone. The checkbox beside the Create Buffer button will display the attributes of the feature highlighted, if any. A feature(s) has to be selected before a buffer can be performed.



Allows the user to drag a box with the cursor to define an area of selection. Any "active" feature that touches or falls within the box will be selected. The selected set will be highlighted. Once features are selected, other functions can be performed on this selected set.



This button allows the user to create a line route upon which all "Active" features the line crosses will be selected or to create a polygon upon which all features touching or contained within that polygon area will be selected. To create a line, click on one or more points in the view and then hit the "Complete Line & Select" button and the selected set will be highlighted and it's attributes will be displayed in the lower window. To create a polygon, click on the view in selected points until the desired area is defined then hit the "Complete Polygon & Select" button to highlight the selected set as well as display the attributes. If a point is hit mistakenly, just hit the "Delete Last Point" button to take it off.



This button/link will clear any selected features or remove any added graphics such as lines or polygons used with the Line/ Polygon tool. This tool is useful after you have zoomed to a city, county, or quadrangle and you want to clear the selection in order to remove the "blue" coloring that highlighted the selected feature.



This button creates a printable, simple map layout of the current view area along with a legend.



Using this button will spawn another window that provides an overview of all tools that may be available in an ArcIMS HTML Viewer. The site can be accessed via this URL: <http://kygeonet.ky.gov/imshelp/>

[Start Here]

This button/link returns the user to the Portal's main entry page with the "Zoom to" pulldown menus and entry forms for project numbers (<http://kygeonet.ky.gov/kyeclearinghouse/main.htm>)

Finding a Project

There are several approaches for finding a water or wastewater infrastructure project in the Portal. The methodology varies based what information the user has regarding the project. If the user knows the WX or SX number of the project, they can start on the main entry page for the Portal @ <http://kygeonet.ky.gov/kyeclearinghouse/main.htm>. This page has two input form fields, one for water and the other for wastewater.

KY e-Clearinghouse Mapping Portal

NOTE: You must be a registered user to access this secure Internet Mapping Application. In order to register, please [click here](#). Use this page to gain quick access to the Kentucky e-Clearinghouse Mapping Portal. The tools on this page will allow you to find or zoom to a feature of interest.

Zoom to a County ... Zoom to a City ... Zoom to a Quadrangle ...

Enter a Wastewater Infrastructure Project Number Below:
NOTE: Your Project Number should be 10 characters long and start with a "SX21".
 Example - SX21013026

SX21 Map It!

Enter a Water Infrastructure Project Number Below:
NOTE: Your Project Number should be 10 characters long and start with a "WX21".
 Example - WX21239003

WX21 Map It!

Type or Paste (Ctrl + V) the SX or WX number in the form field and Click on the 'Map It!' button. The Portal will zoom to the extent of that project.

Of course, if the user is within the primary e-Clearinghouse application and has a project selected, the "View Map" button can be utilized to have the Portal zoom to the project extent.



If the user knows which County, City, or quadrangle the project is located within they can zoom to that area and then visually search for proposed infrastructure projects with the correct SX or WX number. New users will probably find this method to be difficult.

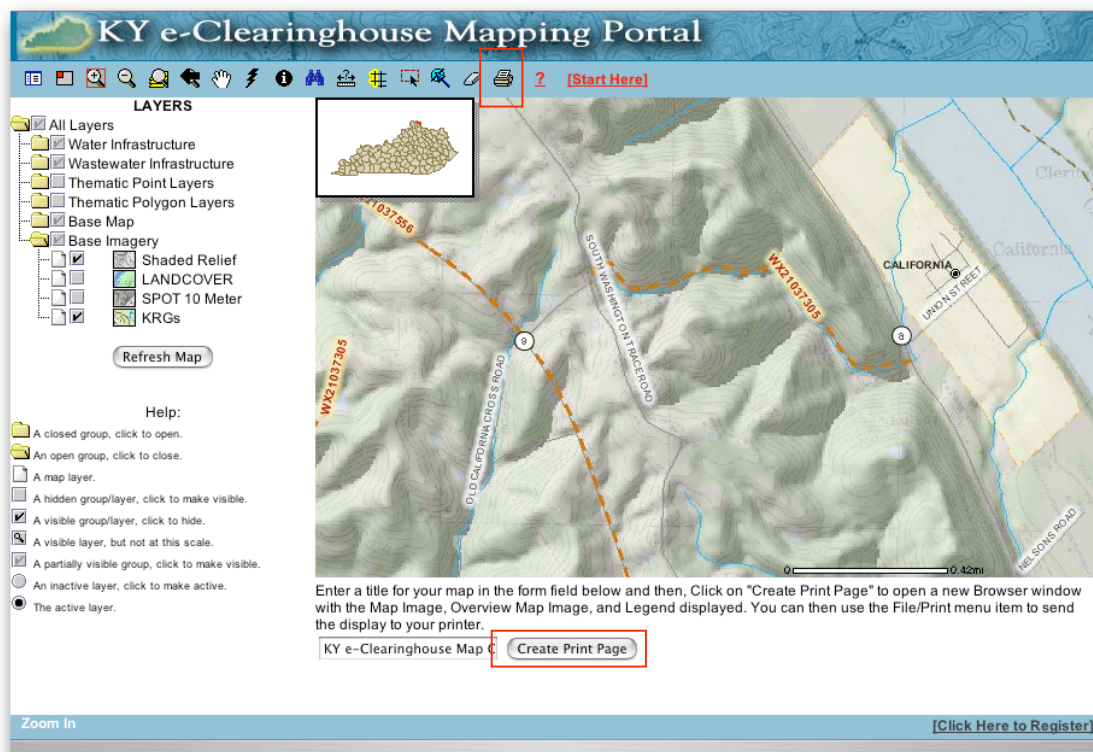
Zooming to an Area of Interest

As illustrated throughout this training session, there are numerous ways that a user can “Zoom to” a project or Area of interest. The pulldown menus can be used on the main entry page for the Portal @ <http://kygeonet.ky.gov/kyeclearinghouse/main.htm>, the zoom tool can be used within the Portal, or the “View Map” button can be utilized within the primary e-Clearinghouse application to have the Portal zoom to the project extent. Experiment with all these methods to find which best suits your needs from review perspective. A good way to practice the zooming routine is to find your house, where your work, your kid’s school, or some other geographic feature that is of interest to you.

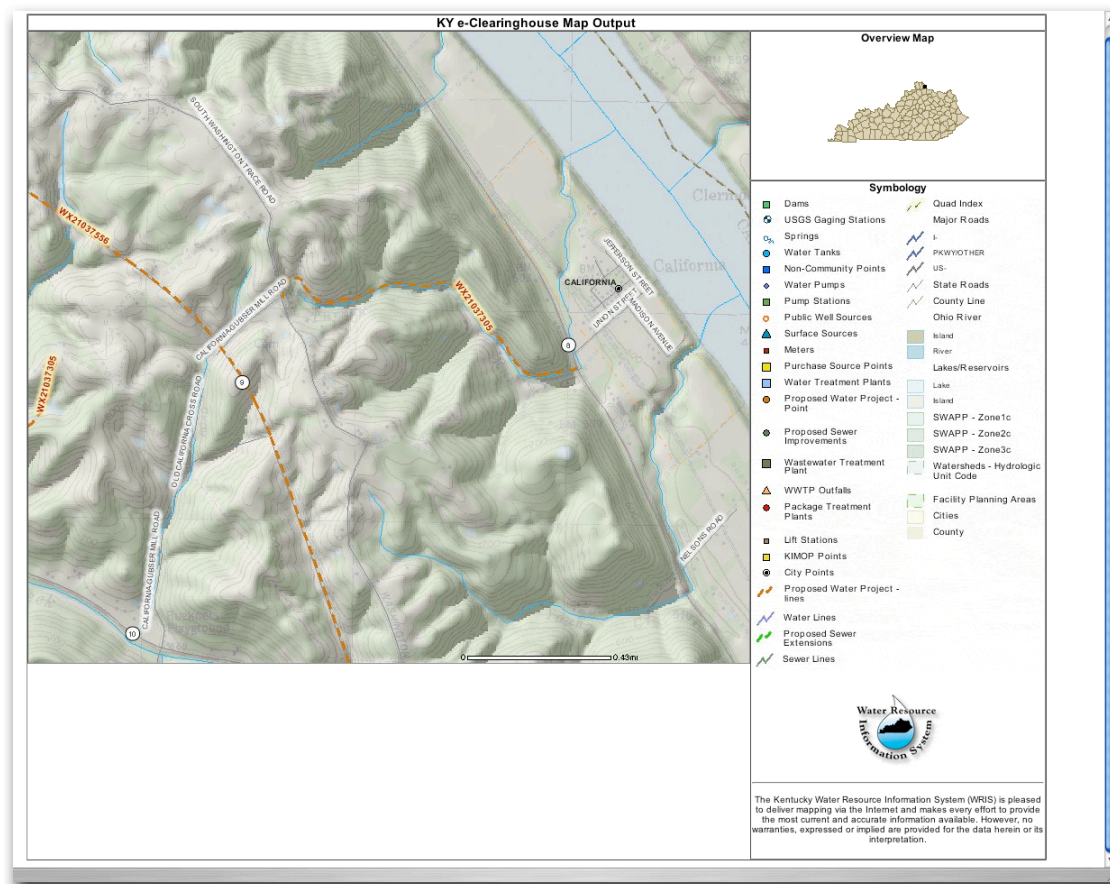
Printing

As noted above under Tool Usage, there is a tool that allows the user to create a simple map layout for hard-copy output. The map layout includes an Overview Map, Legend, and Main Map Image along with a text disclaimer. There should be very few instances when it is necessary to print the map, however the functionality has been provided.

If map printing is required for some reason, simply click on the printer icon in the toolbar. Printing instructions are then shown at the bottom of window with an option to enter a map title. Enter a map title if desired (WX Number for example) and click the “Create Print Page” button.



The map print page that is generated (see example below) can vary greatly in size depending on the size of the user's monitor, the size of the window that the Portal is running within, or even the shape of the window (more square than rectangular for example). In most all instances though, a "landscape" layout must be selected in File > Page Setup in order to get both the main map image, the overview map and the legend on the same printed page.



Another thing to consider is "scaling" or "fit to page" options. Print options will vary depending on the type of printer and web browser that are in use. Even the resolution of a user's monitor can affect the map's dimensions. Users can utilize the "Print Preview" function along with "scaling" or "fit to page" options to determine the best print settings for their computing environment. For example, a user with a 21" monitor set to 1280 x 1024 which has the Portal active in a browser window that consumes 66% of their monitor, will normally need to scale the output to 75% in order to get it to fit on a standard 8.5 x 11 page in landscape format. Output to tabloid (11 x 17) also works extremely well and usually allows for output without having to utilize "fit to page" or "scaling" functions.

Getting Assistance

The first step a user should take when there is an issue with using the Portal is to visit the help site @: <http://wris.ky.gov/imshelp/> and/or refer to this training document.

If the information you need is not in either of these resources, contact your in-house GIS Staff (if there are any-below is a list of known support staff). If you have no GIS Staff, contact either Kent Anness (kent.anness@ky.gov) or Kimberly Anness (Kimberly.anness@ky.gov) @ the Kentucky Infrastructure Authority (502-573-0260).

Agency Contacts

NREPC – Ken Bates

KYTC – Will Holmes, Danielle Buchanan

F&W – Dave Frederick

The WRIS Staff at KIA will make every effort to keep the service up and going, but on some occasions, the Portal may be temporarily unavailable due to server maintenance or upgrades. Any outages that are expected to exceed more than 1 hour will be communicated to all registered users.